

14

0590
0415

OIPE

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/002,631C

DATE: 04/14/2003 P.6

TIME: 14:30:07

Input Set : A:\10002631sequencelisting.txt
 Output Set: N:\CRF4\04142003\J002631C.raw

3 <110> APPLICANT: Graff, Jonathon M.
 4 Muenster, Matthew
 6 <120> TITLE OF INVENTION: METHODS TO IDENTIFY SIGNAL SEQUENCES
 9 <130> FILE REFERENCE: A34943 090495.0243
 11 <140> CURRENT APPLICATION NUMBER: 10/002,631C
 12 <141> CURRENT FILING DATE: 2001-10-31
 14 <150> PRIOR APPLICATION NUMBER: 60/300,309
 15 <151> PRIOR FILING DATE: 2001-06-21
 17 <160> NUMBER OF SEQ ID NOS: 324
 19 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 884
 23 <212> TYPE: DNA
 24 <213> ORGANISM: Homo sapiens
 26 <220> FEATURE:
 27 <221> NAME/KEY: unsure
 28 <222> LOCATION: (608)...(884)
 29 <223> OTHER INFORMATION: n = A, C, G or T
 31 <400> SEQUENCE: 1
 32 ggatccagtg gcaaaaaaac aaacaacaaa caacaaacaa aacaaaacaa acaaaca 60
 33 aatcccacca atcttcatgg gtaaaactttc ctgctcaggg atgtaaatcg actcttagacc 120
 34 atctcgcggat tcctgcggat agcacagcac aagatcatac tgaagatcat gccaaatatc 180
 35 atgaccacgg caatgccat gccccactgcg ccgatgtatgt ggaattttatt gtcgaagacc 240
 36 tctttgatgg catcaggaca ggacttcacg gtgaagggtt cgagtacgtc cttttgggg 300
 37 cagatgtctg agataaactg ttccacgccc ccagccaaac cacagcaggtaa caacgcata 360
 38 tggatggctt tcagcgttcc cccgtggggc tcatccttgg ttttcagctt gtttaggtg 420
 39 tccttgtaaa actcctggac ttcccttaatc acctcatcct tgtggaaata tccccagatg 480
 40 gcccgcgcta ttcaatggc gaatatcacc aagaggaagc ccgaagaaca gtcccagcat 540
 41 gcactggac tcctgcacag ccccgacca gcccaggaag cccaccagca tcattgggc 600
 W--> 42 gccggctncg atcagaatat agactcctgt gttagaagctg gaattattat tattaatgtt 660
 43 cttgctcgaa gatgctttc gnctgagatg cgaatcgaa cccttagtca atggcaagga 720
 44 cagnaattcc cgggnaaggc cccnaannaag aannttaaat cccgaacaag natggtattt 780
 45 gntnccttt gggccctncn ttnttaccgg nntttgttna nggnntnact taancncnggg 840
 46 cccnaacggg ttccgggnant tgggggnncnc ccccnantn ngnn 884
 48 <210> SEQ ID NO: 2
 49 <211> LENGTH: 288
 50 <212> TYPE: PRT
 51 <213> ORGANISM: Homo sapiens
 53 <220> FEATURE:
 54 <221> NAME/KEY: UNSURE
 55 <222> LOCATION: (1)...(93)
 56 <223> OTHER INFORMATION: Xaa = Any amino acid
 58 <400> SEQUENCE: 2

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/002,631C

DATE: 04/14/2003

TIME: 14:30:07

Input Set : A:\10002631sequencelisting.txt

Output Set: N:\CRF4\04142003\J002631C.raw

W--> 59 Xaa Xaa Xaa Gly Xaa Xaa Pro Xaa Xaa Arg Asn Pro Xaa Gly Pro Xaa
 60 1 5 10 15
 61 Xaa Lys Xaa Xaa Xaa Xaa Lys Xaa Pro Val Xaa Xaa Xaa Ala Pro Lys
 62 20 25 30
 63 Gly Xaa Lys Tyr His Xaa Cys Ser Gly Phe Xaa Xaa Leu Xaa Xaa Gly
 64 35 40 45
 65 Leu Xaa Arg Glu Xaa Leu Ser Leu Pro Leu Thr Lys Gly Ser Asp Ser
 66 50 55 60
 67 Thr Leu Xaa Pro Arg Ala Ser Ser Ser Lys Lys Leu Asn Asn Asn Asn
 68 65 70 75 80
 69 Ser Ser Phe Tyr Thr Gly Val Tyr Ile Leu Ile Xaa Ala Gly Ala Leu
 70 85 90 95
 71 Met Met Leu Val Gly Phe Leu Gly Cys Cys Gly Ala Val Gln Glu Ser
 72 100 105 110
 73 Gln Cys Met Leu Gly Leu Phe Phe Gly Leu Pro Leu Gly Asp Ile Arg
 74 115 120 125
 75 His Asn Ser Cys Gly His Leu Gly Ile Phe Pro Gln Gly Gly Asp Gly
 76 130 135 140
 77 Ser Pro Gly Val Leu Gln Gly His Leu Gln Gln Ala Glu Asn Gln Gly
 78 145 150 155 160
 79 Ala Pro Ala Gly Asn Ala Glu Ser His Pro Leu Cys Val Glu Leu Leu
 80 165 170 175
 81 Trp Phe Gly Trp Gly Arg Gly Thr Val Tyr Leu Arg His Leu Pro Gln
 82 180 185 190
 83 Glu Gly Arg Thr Arg Asn Leu His Arg Glu Val Leu Ser Cys His Gln
 84 195 200 205
 85 Arg Gly Leu Arg Gln Ile Pro His His Arg Arg Ser Gly His Arg His
 86 210 215 220
 87 Cys Arg Gly His Asp Ile Trp His Asp Leu Gln Tyr Asp Leu Val Leu
 88 225 230 235 240
 89 Cys Tyr Pro Gln Glu Pro Arg Asp Gly Leu Glu Ser Ala Tyr Ile Pro
 90 245 250 255
 91 Glu Gln Glu Ser Leu Pro Met Lys Ile Gly Gly Ile Phe Cys Leu Phe
 92 260 265 270
 93 Val Leu Phe Cys Leu Leu Phe Val Val Cys Phe Phe Ala Thr Gly Ser
 94 275 280 285
 97 <210> SEQ ID NO: 3
 98 <211> LENGTH: 529
 99 <212> TYPE: DNA
 100 <213> ORGANISM: Homo sapiens
 102 <400> SEQUENCE: 3
 103 actgatcttc agcattttt actttcacca gcgtttctgg gtgaaaagaaa acattcccca 60
 104 gggaaagacaa aagcaacaag ctcaggcgctg acatcaagat acctcccaga aagaggtagc 120
 105 tacggcgctt ggcatacagt gcactgaggg tgaagcaggt aaagatcatt gccgtgcccc 180
 106 tgaaaaggcgt gggaggatg ctgggggtta cagcaataca aaactccagg gcagggcccc 240
 107 ggccaactcc tgtaaggaat gcaaattccag caagaagtcc cagtctttc tgttcagttt 300
 108 catggctatg aggtgttgcc atcagccaaa tcatcaatat cagggagccc aaggcagaca 360
 109 gcaggccagc ctgaatgaaa tgagtgacca tatggacata ggcccctgca gcccaccaa 420
 110 acatacaaaag ggcaaaacctt gcatagacct tcttcagggtg ctgctgcgtt gacggggta 480

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/002,631C

DATE: 04/14/2003
TIME: 14:30:07

Input Set : A:\10002631sequencelisting.txt
Output Set: N:\CRF4\04142003\J002631C.raw

```

111 tatgagaaaa ttttaaaagc gcatcaaagg tcgacgcggc cgcgaaattc      529
113 <210> SEQ ID NO: 4
114 <211> LENGTH: 162
115 <212> TYPE: PRT
116 <213> ORGANISM: Homo sapiens
118 <400> SEQUENCE: 4
119 Glu Phe Ala Ala Ala Ser Thr Phe Asp Ala Leu Leu Lys Phe Ser His
120   1           5           10          15
121 Ile Thr Pro Ser Thr Gln Gln His Leu Lys Lys Val Tyr Ala Ser Phe
122     20          25          30
123 Ala Leu Cys Met Phe Val Ala Ala Gly Ala Tyr Val His Met Val
124     35          40          45
125 Thr His Phe Ile Gln Ala Gly Leu Leu Ser Ala Leu Gly Ser Leu Ile
126     50          55          60
127 Leu Met Ile Trp Leu Met Ala Thr Pro His Ser His Glu Thr Glu Gln
128   65          70          75          80
129 Lys Arg Leu Gly Leu Leu Ala Gly Phe Ala Phe Leu Thr Gly Val Gly
130     85          90          95
131 Leu Gly Pro Ala Leu Glu Phe Cys Ile Ala Val Asn Pro Ser Ile Leu
132     100         105         110
133 Pro Thr Ala Phe Met Gly Thr Ala Met Ile Phe Thr Cys Phe Thr Leu
134     115         120         125
135 Ser Ala Leu Tyr Ala Arg Arg Arg Ser Tyr Leu Phe Leu Gly Gly Ile
136     130         135         140
137 Leu Met Ser Ala Leu Ser Leu Leu Leu Leu Ser Ser Leu Gly Asn Val
138   145         150         155         160
139 Phe Phe
143 <210> SEQ ID NO: 5
144 <211> LENGTH: 454
145 <212> TYPE: DNA
146 <213> ORGANISM: Homo sapiens
148 <400> SEQUENCE: 5
149 ggatccgggc caaaaaaaaaat aaacagcaac ttcatagaca aaaaaaggaaa aaaaaagaaaa 60
150 ccttttatct ttggcctttt taaccatctc atacaaacca actacttata gtacagctaa 120
151 gtacatacac aaaaaaggtt ctggaatgtt cggataaga ttgttttctt gttgtcattt 180
152 ttgctttttt tacaagggtt ttttctctt ttgagattat aatgaacatg gtcacaccac 240
153 aagtaaagtct agaagtagga cagagaacgc tccgaaggct gggttggtca tccgagatca 300
154 ttaaaaatgg ctgaccctaa caatatgtac aaaaatataa aatgtaaata aaaaatacaa 360
155 acaaatttcc tttttaaagt actttaagaa aaaaagcagg gccttggaaag ttttggttct 420
156 ttttcctcc cctggtcgac gcggccgcga attc                                454
158 <210> SEQ ID NO: 6
159 <211> LENGTH: 144
160 <212> TYPE: PRT
161 <213> ORGANISM: Homo sapiens
163 <400> SEQUENCE: 6
164 Asn Ser Arg Pro Arg Arg Pro Gly Glu Glu Lys Arg Thr Lys Thr Ser
165   1           5           10          15
166 Lys Ala Leu Leu Phe Phe Leu Lys Tyr Phe Lys Lys Glu Ile Cys Leu
167     20          25          30

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/002,631C

DATE: 04/14/2003

TIME: 14:30:07

Input Set : A:\10002631sequencelisting.txt
 Output Set: N:\CRF4\04142003\J002631C.raw

168 Tyr Phe Leu Phe Thr Phe Tyr Ile Phe Val His Ile Val Arg Val Ser
 169 35 40 45
 170 His Phe Ser Arg Met Thr Lys Pro Ala Phe Gly Ala Phe Ser Val Leu
 171 50 55 60
 172 Leu Leu Thr Leu Leu Val Val Pro Cys Ser Leu Ser Gln Arg Arg Lys
 173 65 70 75 80
 174 Lys Thr Leu Lys Lys Gln Gln Lys Asn Asn Leu Ile Pro Ser
 175 85 90 95
 176 Ile Pro Val Thr Phe Leu Cys Met Tyr Leu Ala Val Leu Val Val Gly
 177 100 105 110
 178 Leu Tyr Glu Met Val Lys Lys Ala Lys Asp Lys Arg Phe Leu Phe Phe
 179 115 120 125
 180 Ser Phe Phe Val Tyr Glu Val Ala Val Tyr Phe Phe Trp Pro Gly Ser
 181 130 135 140

184 <210> SEQ ID NO: 7

185 <211> LENGTH: 478

186 <212> TYPE: DNA

187 <213> ORGANISM: Homo sapiens

189 <400> SEQUENCE: 7

190 ggatccaagc atcaggagca ggcaaggaga accaaaagac atcaagaaaac cgatttgctt 60
 191 gagaaaaagca gcgattcttc ctttcagagt tctccatggc tcagaaaaatg cccaaagacat 120
 192 catgtatgtg acttagatac tgcttttgg gaggttaaga gtagcatgaa gaacttaaga 180
 193 tgacgataag agtctaaatt tttagtttca aggttcaat agaatgtgga tatattcaaa 240
 194 actttcaaaa aggacagtgt tttagaaaggg taaaactagg acacagaaaaa cactggaaat 300
 195 taccacgacc cccaaagtgc tccggctcca ggaaataacc attcatgtgt ttgctggagg 360
 196 tcacacaatt ttcccattt acctggtgca aaatgactca tcacttcca aaagcttctt 420
 197 ttcaaaccac gatttccca ttatttgg tccaatgcgt cgacgcggcc gcgaattc 478

199 <210> SEQ ID NO: 8

200 <211> LENGTH: 150

201 <212> TYPE: PRT

202 <213> ORGANISM: Homo sapiens

204 <400> SEQUENCE: 8

205 Asn Ser Arg Pro Arg Arg Arg Ile Gly Pro Lys Met Gly Lys Ser Trp
 206 1 5 10 15
 207 Phe Glu Lys Lys Leu Leu Gly Ser Asp Glu Ser Phe Cys Thr Arg Gly
 208 20 25 30
 209 Lys Ile Val Pro Pro Ala Asn Thr Met Val Ile Ser Trp Ser Arg Lys
 210 35 40 45
 211 His Leu Gly Val Val Val Ile Pro Ser Val Phe Cys Val Leu Val Leu
 212 50 55 60
 213 Pro Phe Leu Asn Thr Val Leu Phe Glu Ser Phe Glu Tyr Ile His Ile
 214 65 70 75 80
 215 Leu Leu Lys Pro Asn Lys Phe Arg Leu Leu Ser Ser Ser Val Leu His
 216 85 90 95
 217 Ala Thr Leu Asn Leu Pro Lys Ser Ser Ile Val Thr Tyr Met Met Ser
 218 100 105 110
 219 Trp Ala Phe Ser Glu Pro Trp Arg Thr Leu Lys Gly Arg Ile Ala Ala
 220 115 120 125
 221 Phe Leu Lys Gln Ile Gly Phe Leu Met Ser Phe Gly Ser Pro Cys Leu

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/002,631C

DATE: 04/14/2003
TIME: 14:30:07

Input Set : A:\10002631sequencelisting.txt
Output Set: N:\CRF4\04142003\J002631C.raw

222	130	135	140															
223	Leu	Leu	Met	Leu	Gly	Ser												
224	145			150														
227	<210> SEQ ID NO: 9																	
228	<211> LENGTH: 770																	
229	<212> TYPE: DNA																	
230	<213> ORGANISM: Homo sapiens																	
232	<220> FEATURE:																	
233	<221> NAME/KEY: unsure																	
234	<222> LOCATION: (545)...(757)																	
235	<223> OTHER INFORMATION: n = A, C, G or T																	
237	<400> SEQUENCE: 9																	
238	ggatcctgct	gtgttgttct	ggtagcttcg	gctgctgtaa	gtgacaagtt	gtatgtgcct	60											
239	gttgagtgg	tccagccctg	ggctgacaag	ggtagatct	gcctgaccct	ctccagttag	120											
240	agtaactcca	gtcaacctcc	ctgccacgtc	ccaggtgcct	agggaggcag	tcaggttac	180											
241	ctggataacc	tcctgaccag	aagctgcctg	aaggctcagc	cctggcacca	agatgctcct	240											
242	gaggggctga	acttccacac	cctgttaggg	gtactggagc	ggggagttgg	cagggctat	300											
243	gagcagctgg	tcagctgggg	actggctct	cgacagaaaag	gcctggaact	cctgctct	360											
244	tgtggcagag	gcagccctca	gctctgcagg	gtcaaaggcc	ttggtgaggt	caatagctcg	420											
245	gacttgttcc	tggaagggaa	gggggagggc	ccccccactg	gactcacaa	tgcagttgtt	480											
246	ccaagccagc	agcccaacta	cttgctctt	gatcctgacc	gggatgtgtg	cctagcgggg	540											
W-->	247	ctcangagca	agatctggca	gtctggggct	gcggggcgtt	tgccggggcg	ccacacggcg	600										
248	aagaagtacc	cgangcccg	ggcgccgtnc	cgggtgctcg	cgtacagggan	ccccancagag	660											
249	cccaagccna	ccagaaggac	caaaacgcac	aaggcccgg	cgggccaaacc	acatcctgct	720											
250	aacctntaag	gacgcaaaa	ttcggncgg	cttnancgg	gccggaatta		770											
252	<210> SEQ ID NO: 10																	
253	<211> LENGTH: 255																	
254	<212> TYPE: PRT																	
255	<213> ORGANISM: Homo sapiens																	
257	<220> FEATURE:																	
258	<221> NAME/KEY: UNSURE																	
259	<222> LOCATION: (5)...(75)																	
260	<223> OTHER INFORMATION: Xaa = Any amino acid																	
262	<400> SEQUENCE: 10																	
W-->	263	Ile	Pro	Ala	Gly	Xaa	Xaa	Pro	Xaa	Arg	Ile	Leu	Pro	Ser	Leu	Xaa	Val	
264	1					5				10					15			
265	Ser	Arg	Met	Trp	Leu	Ala	Arg	Arg	Ala	Leu	Val	Arg	Phe	Gly	Pro	Ser		
266										20		25			30			
267	Gly	Xaa	Leu	Gly	Leu	Xaa	Gly	Xaa	Pro	Val	Arg	Glu	His	Pro	Xaa	Arg		
268									35		40		45					
269	Arg	Pro	Gly	Xaa	Arg	Val	Leu	Leu	Ala	Pro	Trp	Ala	Pro	Pro	Gln	Ser		
270									50		55		60					
271	Pro	Arg	Arg	Pro	Glu	Leu	Pro	Asp	Leu	Ala	Xaa	Glu	Pro	Arg	Ala	His		
272									65		70		75		80			
273	Ile	Pro	Val	Arg	Ile	Lys	Glu	Gln	Val	Val	Gly	Leu	Leu	Ala	Trp	Asn		
274									85		90		95					
275	Asn	Cys	Ser	Cys	Glu	Ser	Ser	Gly	Gly	Leu	Pro	Leu	Pro	Phe	Gln			
276									100		105		110					
277	Lys	Gln	Val	Arg	Ala	Ile	Asp	Leu	Thr	Lys	Ala	Phe	Asp	Pro	Ala	Glu		

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 04/14/2003
PATENT APPLICATION: US/10/002,631C TIME: 14:30:08

Input Set : A:\10002631sequencelisting.txt
Output Set: N:\CRF4\04142003\J002631C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 608,682,724,735,743,746,747,753,754,771,782,784,798,800,804
Seq#:1; N Pos. 811,812,819,821,824,825,827,834,837,844,857,859,867,869,876
Seq#:1; N Pos. 878,880,881,883,884
Seq#:2; Xaa Pos. 1,2,3,5,6,8,9,13,16,17,19,20,21,22,24,27,28,29,34,38,43,44
Seq#:2; Xaa Pos. 46,47,50,53,67,92
Seq#:9; N Pos. 545,615,629,650,656,669,726,746,753,755,757
Seq#:10; Xaa Pos. 5,6,8,15,34,38,40,47,52,75
Seq#:13; N Pos. 527,638,682,685,703,734,746,766,805,810,831,832,841,846,849
Seq#:13; N Pos. 856,858,867,888,895,897,900,901,904,910,916,931,932,933,938
Seq#:13; N Pos. 945
Seq#:14; Xaa Pos. 2,4,6,14,15,18,25,28,31,32,37,43,44,57,64,68,84,100,135
Seq#:15; N Pos. 571
Seq#:19; N Pos. 634,662,689,700,710,721,758,783,804,840,859,884,885,889,919
Seq#:20; Xaa Pos. 3,12,14,29,41,48,56,71,73,76,84,93
Seq#:25; N Pos. 582,602
Seq#:26; Xaa Pos. 26,33
Seq#:27; N Pos. 613,651,695,749,757,769,776,785,787,812,818,830,853,874,882
Seq#:27; N Pos. 908,915
Seq#:28; Xaa Pos. 1,3,12,14,20,27,31,33,40,41,44,46,50,53,67,82,93
Seq#:29; N Pos. 611,636,663,720,772,814,823,843,874,876,885,896,908,909,916
Seq#:29; N Pos. 928
Seq#:30; Xaa Pos. 1,8,12,16,19,30,70,87,96,104
Seq#:31; N Pos. 610,628,686,747,781,789,795,821,842,871,893,897,918
Seq#:32; Xaa Pos. 1,8,16,32,40,42,45,56,75,94,100
Seq#:33; N Pos. 596,610,735,740,767,771,786,790,803,805,815,816,817,819,825
Seq#:33; N Pos. 834,835,842,847,848,854,857,858,859,861,863,870,871,875,876
Seq#:33; N Pos. 877,884,889,891,898,908,913,914,915
Seq#:34; Xaa Pos. 1,3,6,9,11,13,14,15,16,18,19,20,21,23,25,27,28,31,33,34
Seq#:34; Xaa Pos. 36,37,41,43,48,49,57,59,103
Seq#:35; N Pos. 596,610,735,740,767,771,786,790,803,805,815,816,817,819,825
Seq#:35; N Pos. 834,835,842,847,848,854,857,858,859,861,863,870,871,875,876
Seq#:35; N Pos. 877,884,889,891,898,908,913,914,915
Seq#:37; N Pos. 586
Seq#:39; N Pos. 634,653,690,696,726,731,744,765,772,780,790,802,832,855,872
Seq#:39; N Pos. 880,895,896
Seq#:40; Xaa Pos. 1,9,15,22,40,45,51,55,57,67,69,81,86
Seq#:41; N Pos. 200,211
Seq#:42; Xaa Pos. 121,125
Seq#:47; N Pos. 7,9,12,14,15,20,21,35,36,37,38,76,103,115,120,121,185,190
Seq#:47; N Pos. 192,198,205,209,237,243,248,260,267,269,272,287,290,297,298
Seq#:47; N Pos. 300,303,305,314,315,316,320,326,331,332,333,341,342,352,353
Seq#:47; N Pos. 359,364,365,368,378,383,385,400,414,440,476,487,497,524,545
Seq#:47; N Pos. 550,590,594
Seq#:48; Xaa Pos. 2,3,17,24,33,40,52,61,70,71,73,76,77,79,81,83,86,88,90,92

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 04/14/2003
PATENT APPLICATION: US/10/002,631C TIME: 14:30:08

Input Set : A:\10002631sequencelisting.txt
Output Set: N:\CRF4\04142003\J002631C.raw

Seq#:48; Xaa Pos. 95,96,97,98,100,101,106,107,108,110,114,116,118,127,128
Seq#:48; Xaa Pos. 131,133,135,155,156,157,169,182,183,188,190,191,192
Seq#:49; N Pos. 191,538
Seq#:50; Xaa Pos. 107
Seq#:51; N Pos. 512,547,555,563,580,614,624,625,630,632,639,650,666,670,671
Seq#:51; N Pos. 672,674,679,680,682,684,685,686,693,697,701,702,705,706,708
Seq#:51; N Pos. 712,713,714,715,720,721,723,726,728,730,731,734,735,737,740

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/002,631C

DATE: 04/14/2003
TIME: 14:30:08

Input Set : A:\10002631sequencelisting.txt
Output Set: N:\CRF4\04142003\J002631C.raw

L:42 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:600
M:341 Repeated in SeqNo=1
L:59 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
M:341 Repeated in SeqNo=2
L:247 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:540
M:341 Repeated in SeqNo=9
L:263 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
M:341 Repeated in SeqNo=10
L:360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:480
M:341 Repeated in SeqNo=13
L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
M:341 Repeated in SeqNo=14
L:442 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:540
L:532 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:600
M:341 Repeated in SeqNo=19
L:550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
M:341 Repeated in SeqNo=20
L:685 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:540
M:341 Repeated in SeqNo=25
L:702 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:16
M:341 Repeated in SeqNo=26
L:751 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:600
M:341 Repeated in SeqNo=27
L:769 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
M:341 Repeated in SeqNo=28
L:822 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:600
M:341 Repeated in SeqNo=29
L:840 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
M:341 Repeated in SeqNo=30
L:903 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:600
M:341 Repeated in SeqNo=31
L:921 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0
M:341 Repeated in SeqNo=32
L:981 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:540
M:341 Repeated in SeqNo=33
L:1000 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0
M:341 Repeated in SeqNo=34
L:1060 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:540
M:341 Repeated in SeqNo=35
L:1110 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:540
L:1166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:600
M:341 Repeated in SeqNo=39
L:1183 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0
M:341 Repeated in SeqNo=40
L:1237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:180
L:1271 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:112
L:1375 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0
M:341 Repeated in SeqNo=47

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/002,631C

DATE: 04/14/2003

TIME: 14:30:08

Input Set : A:\10002631sequencelisting.txt
Output Set: N:\CRF4\04142003\J002631C.raw

L:1397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0
M:341 Repeated in SeqNo=48